The team reflects on creating **The Spectrum** with a message from Sir Clive Sinclair's son.

Sophie

The ZX Spectrum has long been a name I've heard from family members whenever we'd talk about our love for games and consoles. It wasn't until I started working on The Spectrum at Retro Games Ltd that I truly began to appreciate it—not just as a legendary name in gaming history, but as an experience all its own.

I worked with Darren to license some of the pre-installed titles for The Spectrum and helped to coordinate the production of the UK exclusive CRASH magazine. From researching its top titles to admiring its iconic design, The Spectrum quickly became a piece of history I came to know and love.

The 48K design, with its distinctive rubber keyboard, is unlike any console I grew up with, and holding it for the first time was a memorable experience. Sitting in a traditional German pub during Gamescom week, I was struck by the quality and weight of the machine. Even though Chris mentioned that we weren't holding the final version yet, I felt an immense pride in what our team had accomplished.

My first gaming device was a see-through Game Boy Color. I remember playing Pokémon Yellow for hours, often hiding it under my covers late into the night and continuing to play after my mum told me to go to bed. The ZX Spectrum, however, has given me a newfound appreciation for the earlier days of gaming and the machines that paved the way for so many players.

Dylan

Like many of my age, the ZX Spectrum was what allowed me to get into writing software. To me, the Spectrum wasn't just for games. While I spent many hours with my Dad taking turns trying to beat each other at Chequered Flag, and whiled away many hours trying to get as far as I could with Manic Miner, Elite, Starstrike and my favourite - misbehaving in Skool Daze - getting into Z80 asm with HiSoft GENS and MONS with the Rodnay Zaks Z80 manual and the Melbourne House books are also treasured memories from back in the day. Being able to work on making a product that was so important to me growing up has been a great privilege, even if at some points it has had its frustrations - but this is true when working with any software! If you asked me five years ago if my job would involve working with Z80 assembly language I'd have laughed, yet here I am. It's not just the software, I've done the electronics design for some of our test harnesses - one of the things we do for our products is to minimise the amount of latency, and to do this properly requires measurement tools, and we've built these tools ourselves.

Harvey

As one of the younger members of the team, the world of the ZX Spectrum was well off my retro radar. However, this allowed me to have the same sense of discovery that I'm sure many experienced the first time they set eyes on the iconic original model.

Whilst working on some of the visual assets for The Spectrum, I quickly grew to appreciate the combination of elegance and simplicity which Rick Dickinson used to create the timeless form factor of the ZX Spectrum. Considering the original design was sketched on a drawing board by hand in the early 80's, makes it all the more impressive when compared to the 3D technology we use today.

I was amazed by how much character and personality those early pixel pioneers were able to put into some classic Spectrum titles. The same goes for a lot of the original advertisements, cover arts and printed materials surrounding the Speccy. When developing our UI and visuals, we wanted to complement this unique charm allowing the original assets to shine.

Seeing the final completed package gave me a great sense of pride, knowing that I helped contribute to continuing the legacy of British engineering and computing. I'm excited to be working on future projects at RGL, going through the same journey of discovery all over again.

Flinn

From a very young age, I've been fascinated with how video games are made and the technology that powers them, leading me to a degree in Games Programming. I've always held a burning fascination with retro computing, which eventually led to me working with the passionate team at RGL!
I worked closely alongside the talented duo Chris and Dylan - testing The Spectrum, implementing patches for some of the licensed games in Z80 assembly, and helping to maintain the console's codebase.
Despite unfortunately missing the original excitement of using a ZX Spectrum on its release, I've been fortunate enough to uncover its charm through the fantastic community surrounding it. Playing through the iconic catalogue of classics, and exploring the available titles from the passionate homebrew community, I was amazed by the ingenuity of developers who pushed the machine to its absolute limits, creating iconic visuals and gameplay mechanics.
Being given the opportunity to help in creating a product so important to the retro community has been such a great privilege, and I hope that The Spectrum gives people the opportunity to revisit the industry-changing platform and the memories they share with it!

Darren Melbourne

One of the only advantages of being old is that I've got a relatively encyclopedic knowledge of the computer games that were released during the 1980s and 1990s. Licensing content for the Retro Games portfolio of machines is always a challenge as we are inevitably dealing with games that were created 4 decades previously. A big part of a licensing director's job involves detective work to uncover who retains ownership of IP. In cases where publishers have either sold their companies or ceased trading, it then becomes necessary to track down the individuals or entities that subsequently acquired the rights to the IP.
With The Spectrum we are particularly proud of the quality of the games that we have been able to license with seminal classics such as Head over Heels, Manic Miner, and The Hobbit, allowing people to once again play the games that they loved in their youth. Manic Miner was a particular challenge. Since creating the game, the legend that is Matthew Smith has become somewhat of a recluse. We were determined to license the game for The Spectrum as it was such a phenomenal game

and such a massive part of so many people's lives. After drawing a blank with telephone calls, text messages, and emails, we resolved to travel to Liverpool and visit Matthew at home to see if we could discuss licensing the game in person. After Matthew's initial surprise, we headed for his local pub where we discussed a deal to bring the game to The Spectrum. We finalised terms over a chicken vindaloo and several more pints of Guinness.
Every machine that we produce presents its own challenges from a licensing perspective, the majority of our work is done over email and telephone calls. However, occasionally we have a great day at the office and get to spend time with a true legend of the British video gaming industry, Matthew Smith.

Chris Smith

Without doubt Sir Clive Sinclair's range of affordable home computers steered the UK towards general computer literacy, and the formation of a thriving software and games industry far sooner than would have otherwise been the case. I was one of those affected, from the ZX81 and then ZX Spectrum, with which I marvelled in awe at the technical boundaries that were pushed further each month by game programmers. I was young, inspired, and wanted to be part of that development scene, so honed my skills writing game after game until eventually I was published and worked for Mikro-Gen Ltd, albeit briefly.
At the same time I experimented with creating my own computer, but it was never completed.

The Spectrum

I came back to this idea 20 years later and designed my own ZX Spectrum from scratch, creating the first 100% timing accurate clone which I named The Harlequin. This turned out to be a big deal because the ZX Spectrum contained most of its logic hidden inside a custom chip called the ULA for which there is no official documentation, and at the time no firm understanding of how it worked. I felt I may have uncovered its secrets but the only way to be sure was to open a ULA package, photograph the silicon chip under a microscope, work out where all the transistors are and how they are connected, and finally describe the entire chip operation. So I did just that over the course of a year, discovering some hidden features and culminating in my publishing the book “The ZX Spectrum ULA - How to design a microcomputer”, a journey which gave me the opportunity to meet and get to know Richard Altwasser, Rick Dickinson and Sir Clive Sinclair.

Five years later I co-founded Retro Games Ltd, developing a range of mini and full size retro consoles, the latest of which is The Spectrum which brings me full circle back to where I started 42 years ago, but this time with intimate knowledge of how the ZX Spectrum works. There have been interesting parallels between the development of The Spectrum and the original ZX Spectrum. For example, The Spectrum contains the same case design, keyboard matrix, rubber key mat and printed key plate as the original, and some of the processes needed to create these aren’t used anymore, so we had to re-develop them, much like Sinclair would have had to do back in 1981. Attention to detail is very important to me in our products, and especially so with The Spectrum. I know that Rick was particularly thrilled by the continued love and appreciation of his designs, and I feel that what we’ve created in The Spectrum for today’s user honours Rick and Sir Clive, and is something they would both have loved.

Paul Andrews

In many ways you could say I started this journey back in 1982 when I worked as many paper rounds as I could in any given week (come rain or shine, but nearly always rain...) and I purchased (paying weekly) a 48K Sinclair Spectrum, and a 12” colour Fergusion TX portable TV! Like all of you I have so many happy memories of the excitement of playing games for the first time, of trying to program simple things on the spectrum using magazine type ins, and going round chum’s houses in the summer holidays with us all playing test cricket (bizarrely) on the Spectrum together. My love of all things Sinclair stuck with me and I started collecting (and still have) a very unique collection of Sinclair machines, and other one offs, some of them signed by Sir Clive and Rick Dickinson etc. Plus, a large collection of original Spectrum game cover art by such artists as Roger Garland, David Rowe and Oliver Fray, topped off of course by ‘Alien’ the world’s fastest C5 which is currently being restored in partnership with Bedfordshire University.

But around 16 years ago I was running my own games company and had been invited by Nintendo to be part of the launch of Wii Ware in Germany with our release *Squibs Arcade* which was a retro themed title. I ended up spending much of the trip with someone from a separate games company, who had gone to school with Sir Clive’s son, and I told him how I intended to do a book on Clive’s many products, and he said he would do an intro for me. It was a few years after that when I did actually reach

out to Crispin, who in turn spoke to his father, and the message came back to me, 'feel free to ring him' and a telephone number. I duly did, and Clive graciously invited me to his London penthouse overlooking Trafalgar Square. I explained to Clive about my book idea, which he gave me full permission to crack on with and use any materials I wanted to from the past, but I also told him how my company had actually been the one (behind the NDAs) doing all the code and emulation for the C64 games which were released onto the Nintendo Wii. Separate to that I had done a deal with Sir Alan Sugars son to do something similar with ZX Spectrum games, but it had all fell apart at the last minute due to SKY buying Amstrad. SKY then offered to sell me all the Sinclair rights, but didn't want to do the deal I'd arranged prior with Amstrad, and sadly at that point in time I didn't have enough funds to buy the rights outright. But Clive said 'Well if you can do a deal with Sky still, I'd be happy to put my name to it and work with you'.

It's hard to explain how magic it was not only meeting and talking but actually being in business with him. The rest is history, some of it very elating like finding Chris, and starting to work with him, to the triumph of what we achieved with that original release being delivered successfully to backers, to the sadness and tears of what followed later, which we had literally no control of.

To then once again the triumph of Retro Games Ltd being formed by Chris, Darren and myself, and the various machines we have released in the near decade now, leading right up to The Spectrum itself. Obviously, it's not the end of RGLs or my story, in fact in many ways it's just the beginning for RGL and more. Separate to RGL, my guys are also releasing retro games onto Nintendo Switch, Steam and Xbox pending, and we have many other surprise projects I've got brewing in many medias, but it has been a long emotional journey to The Spectrum, and I'd like to say thank you to each and everyone one of you who has supported RGL, and even more so to the people who have supported me personally, you know who you are, and I thank you from the bottom of my heart.

On that note I'm going to hand over to Crispin Sinclair, Sir Clive's son. I asked him if he would mind saying something about The Spectrum, as I genuinely felt YOU all would appreciate knowing his feelings about what we have achieved, as obviously Sir Clive was Crispin's father, and Clive his children's grandfather, but to all of us he WAS Uncle Clive, and so I feel we are ALL part of the global Sinclair family he created.

Crispin Sinclair

When my father released the ZX Spectrum back in 1982, he also created in many ways the start of the UK software and computer industry. From people learning to code, who to this day are still writing games and much more, to the people and companies which it spawned and inspired, which can also be traced influence wise into the phones we all use today. Paul kindly offered to give my family some units of The Spectrum, and I have to say we are overjoyed with them. My children are now learning hands on what their grandfather created, and what it seeded within so many people and companies and its huge legacy. Plus, they are actually loving playing on it and exploring the games included with it. We have even purchased more The Spectrums for the family. Paul also asked me would I write a few lines about what this has meant to us, as he felt that us commenting would also mean something to many of you. The Spectrum brings back so many happy memories for us all, and it is a delight to see it reborn. We know that it also means so much to you all, just as it does to us, and I'm fairly sure my father would be happy to know that what he and Paul discussed together about bringing The Spectrum back to a new generation, (that conversation itself being over a decade ago), that mission has now been very successfully finally accomplished, and I hope you all enjoy it as much we are!

Merry Christmas from

RETRO GAMES